

Abstract of the Disclosure

Manufacturing processes for articles that are formed from compositions of matter that include powders containing tungsten and at least one binder, as well as articles formed thereby. In some embodiments, the processes
5 include compacting the mixture of powders under a first pressure to yield a desired intermediate structure, then reshaping the structure under a second pressure that is lower than the first pressure to yield the desired article. The compacting steps may include punches and/or dies having different configurations and/or materials of construction. The composition of matter preferably is selected to reflow, or be
10 reshaped, without fragmenting or otherwise disintegrating into discrete particles or particulate. In some embodiments, the compacted intermediate structure and/or final article has an extrusion constant of less than 30,000 psi. In some embodiments, the mixture of powders has an ASTM Hall flowmeter reading for fifty grams through a cone (without tapping) of less than 18 seconds.